

WHAT IS CLAIMED IS:

1. A network control system in which a first unit and a second unit are connected to each other through a transmission path and a controller included in said first unit controls a device in said second unit through said transmission path,

5 at least one of said first unit and said second unit being for handling at least one of video, audio, and information,

said device

having screen display data for displaying an operating screen of said device and identification information for
10 identifying the screen display data, and

transmitting said screen display data and said identification information to said controller through said transmission path, and

said controller

15 comprising a user interface including display means; receiving said screen display data and said identification information from said device through said transmission path;

20 displaying said operating screen on said display means using said screen display data; and

in response to an operation by a user to said operating screen, controlling said device by transmitting operation information indicative of the operation and said identification

information to said device through said transmission path.

2. A network control system in which a first unit and a second unit are connected to each other a transmission path and a controller included in said first unit controls a device in said second unit through said transmission path,

5 at least one of said first unit and said second unit being for handling at least one of video, audio, and information,

said device 1/2

having screen display data for displaying an operating screen of said device and identification information for
10 identifying the screen display data; and

transmitting said screen display data and said identification information to said controller through said transmission path, and

said controller

15 comprising a user interface including display means;
receiving said screen display data and said identification information from said device through said transmission path;

20 displaying said operating screen on said display means using said screen display data and said identification information; and

in response to an operation by a user to said operating screen, controlling said device by transmitting operation

information indicative of the operation and said identification
25 information to said device through said transmission path.

3. The network control system according to claim 1 ~~or~~ 2, wherein
said identification information includes version
information indicating a version of said screen display data.

4. The network control system according to claim 1 ~~or~~ 2, wherein
said operation information includes an operating position
information indicative of an operating position on said operating
screen.

5. A network control system in which a first unit and a second
unit are connected to each other a transmission path and a
controller included in said first unit controls a device in said
second unit through said transmission path,

5 at least one of said first unit and said second unit being
for handling at least one of video, audio, and information,
said device

having screen display data composed of a plurality of
partial screen display data for displaying an operating screen
10 of said device; and

transmitting said partial screen display data to said
controller through said transmission path, and
said controller

comprising a user interface including display means;

15 receiving said partial screen display data from said device through said transmission path;

displaying said operating screen on said display means using said partial screen display data; and

20 in response to an operation by a user to said operating screen, controlling said device by transmitting operation information indicative of the operation to said device through said transmission path.

6. The network control system according to claim 5, wherein

when said screen display data of said device is changed, said device transmits changed partial screen display data of said screen display data to said controller; and

5 said controller receives the changed partial screen display data from said device through said transmission path and, based on the received partial screen display data, updates said operating screen displayed on said display means.

7. The network control system according to claim 5, wherein said device

has partial screen identification information for identifying said partial screen display data; and

5 transmits said partial screen display data and said partial screen identification information to said controller

through said transmission path, and

said controller

receives said partial screen display data and said partial
screen identification information from said device through said
10 transmission path.

8. The network control system according to claim 7, wherein

when said screen display data of said device is changed,
said device transmits changed partial screen display data of said
screen display data and the partial screen identification
5 information of the partial screen display data to said controller,
and

said controller receives the changed partial screen display
data and the partial screen identification information of the
partial screen display data from said device through said
10 transmission path and, based on the received partial screen
display data and partial screen identification information,
updates said operating screen displayed on said display means.

9. The network control system according to claim 7, wherein

in response to an operation by a user to said operating
screen, said controller controls said device by transmitting
operation information indicative of the operation and the partial
screen identification information corresponding to the operation
5 to said device through said transmission path.

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a 10. The network control system according to claim 7 or 9, wherein
said partial screen identification information includes
version information indicating a version of said partial screen
display data.

a 11. The network control system according to claim 7 or 9, wherein
one display element in screen display is arranged in any
one of a plurality of display parts corresponding to said
plurality of partial screen display data.

a 12. The network control system according to claim 7 or 9, wherein
a display element corresponding to each operation by the
user is arranged in any one of a plurality of display parts
corresponding to said plurality of partial screen display data.

13. A network control system in which a first unit and a second
unit are connected to each other a transmission path and a
controller included in said first unit controls a device in said
second unit through said transmission path,

5 at least one of said first unit and said second unit being
for handling at least one of video, audio, and information,

said device

having screen display data for displaying an operating
screen of said device and overlap display data for overlap display

10 on said operating screen; and

transmitting said screen display data and said overlap display data to said controller through said transmission path, and

said controller

15 comprising a user interface including display means;
receiving said screen display data and said overlap display data from said device through said transmission path;
displaying said operating screen on said display means using said screen display data, and carrying out overlap display
20 on said operating screen displayed on said display means by using said overlap display data; and

in response to an operation by a user to said operating screen, controlling said device by transmitting operation information indicative of the operation to said device through
25 said transmission path.

14. The network control system according to claim 13, wherein said overlap display data is cursor information for displaying a cursor indicative of a position of operation by the user to said operating screen.

15. The network control system according to claim 14, wherein said cursor information includes position information indicative of a position of said cursor on said operating screen.

16. The network control system according to claim 14, wherein
said cursor information includes shape information
indicative of a shape of said cursor.

17. The network control system according to claim 14, wherein
said cursor information includes size information
indicative of a size of said cursor.

18. The network control system according to claim 14, wherein
said cursor information includes color information
indicative of a color of said cursor.

19. The network control system according to claim 14, wherein
said cursor information includes enable information
indicating an operation that the user is allowed to perform.

20. The network control system according to claim 13, wherein
when a display part corresponding to said overlap display
data of said device is changed, said device transmits said overlap
display data to said controller, and

5 said controller receives said overlap display data from
said device through said transmission path and, based on said
received overlap display data, updates said operating screen
displayed on said display means.

21. A network control system in which a first unit and a second unit are connected to each other a transmission path and a controller included in said first unit controls a device in said second unit through said transmission path,

5 at least one of said first unit and said second unit being for handling at least one of video, audio, and information,

 said device

 having screen display data for displaying an operating screen of said device and identification information for
10 identifying the screen display data; and

 transmitting said screen display data and said identification information to said controller through said transmission path, and

 said controller

15 comprising a user interface including display means;

 receiving said screen display data and said identification information from said device through said transmission path; and

 displaying said operating screen on said display means
20 using said screen display data.

22. A network control system in which a first unit and a second unit are connected to each other a transmission path and a controller included in said first unit controls a device in said second unit through said transmission path,

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5 at least one of said first unit and said second unit being
for handling at least one of video, audio, and information,
said device

having screen display data for displaying an operating
screen of said device and identification information for
10 identifying the screen display data;

transmitting said screen display data and said
identification information to said controller through said
transmission path, and

said controller

15 comprising a user interface including display means;

receiving said screen display data and said
identification information from said device through said
transmission path; and

displaying said operating screen on said display means
20 using said screen display data and said identification
information.

23. A network control system in which a first unit and a second
unit are connected to each other a transmission path and a
controller included in said first unit controls a device in said
second unit through said transmission path,

5 at least one of said first unit and said second unit being
for handling at least one of video, audio, and information,
said device

having screen display data for displaying an operating
screen of said device and overlap display data for overlap display
10 on said operating screen; and

transmitting said screen display data and said overlap
display data to said controller through said transmission path,
and

said controller

15 comprising a user interface including display means;
receiving said screen display data and said overlap
display data from said device through said transmission path; and
displaying said operating screen on said display means
using said screen display data, and carrying out overlap display
20 on said operating screen displayed on said display means by using
said overlap display data.

24. A second unit that is connected through a transmission path
to a first unit including a controller and includes a device
controlled by said controller through said transmission path,

at least one of said first unit and said second unit being
5 for handling at least one of video, audio, and information,

said device

having screen display data for displaying an operating
screen of said device and identification information for
identifying the screen display data;

10 transmitting said screen display data and said

identification information to said controller through said transmission path; and

receiving the identification information of the screen display data and operation information indicative of an operation
15 by a user, and operating based on the received identification information and operation information.

25. A first unit that is connected through a transmission path to a second unit and includes a controller for controlling a device included in said second unit through said transmission path,

at least one of said first unit and said second unit being
5 for handling at least one of video, audio, and information,

said controller

comprising a user interface including display means;

receiving screen display data indicative of an operating screen of said device and identification information for
10 identifying the screen display data from said device through said transmission path;

displaying said operating screen on said display means using said screen display data; and

in response to an operation by a user to said operating
15 screen, controlling said device by transmitting operation information indicative of the operation and said identification information to said device through said transmission path.

26. The second unit according to claim 24, wherein

said operation information includes operating position information indicative of a position of operation on said operating screen.

27. The first unit according to claim 25, wherein

said operation information includes operating position information indicative of a position of operation on said operating screen.

28. A second unit that is connected through a transmission path to a first unit including a controller and includes a device controlled by said controller through said transmission path,

at least one of said first unit and said second unit being
5 for handling at least one of video, audio, and information,
said device

having screen display data composed of a plurality of partial screen display data for displaying an operating screen of said device;

10 transmitting said partial screen display data to said controller through said transmission path; and

receiving operation information indicative of an operation by a user, and operating based on the received operation information.

29. A first unit that is connected through a transmission path to a second unit and includes a controller for controlling a device included in said second unit through said transmission path,

at least one of said first unit and said second unit being
5 for handling at least one of video, audio, and information,
said controller

comprising a user interface including display means;
receiving a plurality of partial screen display data
indicative of an operating screen of said device through said
10 transmission path from said device;

displaying said operating screen on said display means
using said partial screen display data; and

in response to an operation by a user to said operating
screen, controlling said device by transmitting operation
15 information indicative of the operation through said transmission
path to said device.

30. The second unit according to claim 28, wherein

when said screen display data of said device is changed,
said device transmits changed partial screen display data of said
screen display data to said controller.

31. The first unit according to claim 29, wherein

when said screen display data of said device is changed,
said controller receives changed partial screen display data of

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said screen display data from said device through said
5 transmission path and, based on the received partial screen
display data, updates said operating screen displayed on said
display means.

32. A second unit that is connected through a transmission path
to a first unit including a controller and includes a device
controlled by said controller through said transmission path,

at least one of said first unit and said second unit being
5 for handling at least one of video, audio, and information, and
said device

having screen display data for displaying an operating
screen of said device and overlap display data for overlap display
on said operating screen;

10 transmitting said screen display data and said overlap
display data to said controller through said transmission path;
and

receiving operation information indicating a user's
operation transmitted from said controller, and operating based
15 on the received operation information.

33. A first unit that is connected through a transmission path
to a second unit and includes a controller for controlling a device
included in said second unit through said transmission path,

at least one of said first unit and said second unit being

5 for handling at least one of video, audio, and information,
said controller
comprising a user interface including display means;
receiving screen display data indicative of an operating
screen of said device and overlap display data for overlap display
10 on said operating screen through said transmission path;
displaying said operating screen of said device on said
display means using said screen display data, and performing
overlap display on said operating screen displayed on said display
means using said overlap display data; and
15 in response to an operation by a user to said operating
screen, controlling said device by transmitting operation
information indicating the operation through said transmission
path to said device.

34. A control method, in a network control system in which a first
unit and a second unit are connected to each other a transmission
path, at least one of said first unit and said second unit being
for handling at least one of video, audio, and information, and
5 a controller included in said first unit controlling a device
included in said second unit through said transmission path, said
control method comprising the steps of:

transmitting screen display data for displaying an
operating screen of said device and identification information
10 for identifying the screen display data from said device through

said transmission path to said controller;

displaying said operating screen on said controller using
said screen display data transmitted from said device; and

in response to an operation by a user to said operating
15 screen, controlling said device by transmitting operation
information indicative of the operation and said identification
information from said controller through said transmission path
to said device.

35. A control method, in a network control system in which a first
unit and a second unit are connected to each other a transmission
path, at least one of said first unit and said second unit being
for handling at least one of video, audio, and information, and
5 a controller included in said first unit controlling a device
included in said second unit through said transmission path, said
control method comprising the steps of:

transmitting screen display data for displaying an
operating screen of said device and identification information
10 for identifying the screen display data from said device through
said transmission path to said controller;

displaying said operating screen on said controller using
said screen display data and said identification information
transmitted from said device; and

15 in response to an operation by a user to said operating
screen, controlling said device by transmitting operation

information indicative of the operation and said identification information from said controller through said transmission path to said device.

36. A control method, in a network control system in which a first unit and a second unit are connected to each other a transmission path, at least one of said first unit and said second unit being for handling at least one of video, audio, and information, and
5 a controller included in said first unit controlling a device included in said second unit through said transmission path, said control method comprising the steps of:

transmitting at least one of plurality of partial screen display data composing screen display data for displaying an
10 operating screen of said device from said device through said transmission path to said controller;

displaying said operating screen on said controller using said partial screen display data transmitted from said device;
and

15 in response to an operation by a user to said operating screen, controlling said device by transmitting operation information indicative of the operation from said controller through said transmission path to said device.

37. A control method, in a network control system in which a first unit and a second unit are connected to each other a transmission

path, at least one of said first unit and said second unit being
for handling at least one of video, audio, and information, and
5 a controller included in said first unit controlling a device
included in said second unit through said transmission path, said
control method comprising the steps of:

transmitting screen display data for displaying an
operating screen of said device and overlap display data for
10 overlap display on said operating screen from said device through
said transmission path to said controller;

displaying said operating screen on said controller and
performing overlap display on said displayed operating screen
based on said overlap display data by using said screen display
15 data and said overlap display data transmitted from said device;
and

in response to an operation by a user to said operating
screen, controlling said device by transmitting operation
information indicative of the operation from said controller
20 through said transmission path to said device.

38. A control method, in a network control system in which a first
unit and a second unit are connected to each other a transmission
path, at least one of said first unit and said second unit being
for handling at least one of video, audio, and information, and
5 a controller included in said first unit controlling a device
included in said second unit through said transmission path, said

control method comprising the steps of:

transmitting screen display data for displaying an
operating screen of said device and identification information
10 for identifying the screen display data from said device through
said transmission path to said controller; and

displaying said operating screen on said controller using
said screen display data transmitted from said device.

39. A control method, in a network control system in which a first
unit and a second unit are connected to each other a transmission
path, at least one of said first unit and said second unit being
for handling at least one of video, audio, and information, and
5 a controller included in said first unit controlling a device
included in said second unit through said transmission path, said
control method comprising the steps of:

transmitting screen display data for displaying an
operating screen of said device and identification information
10 for identifying the screen display data from said device through
said transmission path to said controller; and

displaying said operating screen on said controller using
said screen display data and said identification information
transmitted from said device.

40. A control method, in a network control system in which a first
unit and a second unit are connected to each other a transmission

path, at least one of said first unit and said second unit being
for handling at least one of video, audio, and information, and
5 a controller included in said first unit controlling a device
included in said second unit through said transmission path, said
control method comprising the steps of:

transmitting screen display data for displaying an
operating screen of said device and overlap display data for
10 overlap display on said operating screen from said device through
said transmission path to said controller; and

displaying said operating screen on said controller and
performing overlap display on said operating screen based on said
overlap display data by using said screen display data and said
15 overlap display data transmitted from said device.

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